Chapter

8

Yard Waste

Yard Waste - Current Fairfax County Management System, Anticipated Gaps in Waste Management, and SWMP Actions

This chapter presents the process used by the county to evaluate the current SWM system, project the future waste stream, identify anticipated gaps in waste management, and select SWMP actions for yard waste.

This chapter presents the evaluation of Fairfax County's current and projected solid waste management (SWM) activities for yard waste, organized by the SWM hierarchy. It uses the hierarchy as the framework for determining how to bridge the gaps between the current SWM activities and the strategies needed to manage the county's yard waste in the future. The chapter then presents Fairfax County's SWMP actions for yard waste over the next 20 years to address those gaps.

Using the SWM hierarchy, Fairfax County staff first evaluated current SWM practices, including source reduction and reuse initiatives, recycling activities and programs, future markets for recyclables, collection operations, and transfer facilities. (Since all yard waste generated in the county is required to be recycled, the county did not evaluate disposal). Next, the county reviewed the current and future projections of its solid waste stream quantities over the SWMP planning period. Using these projections, the county assessed the changes in the solid waste stream over the planning period and identified the critical areas requiring modification. Finally, the county selected SWMP actions that will close the gaps between its current SWM system and that required in the future.

Overview of the 20-Year Plan for Fairfax County's Yard Waste Management System

Fairfax County's current SWM programs and activities for yard waste, the gaps in waste management, and SWMP actions over the SWMP planning period are summarized in Table 8-1. This table is organized by level of the waste hierarchy, from source reduction and reuse, to recycling, collection, transfer, and disposal. (Note that private companies are responsible for many of the activities in the current and future system.)

Table 8-1. Yard Waste: Current Waste Management Activities, Anticipated Gaps in Waste Management, and SWMP Actions

	Current Programs in the County	Anticipated Gaps	SWMP Actions
Source reduction and reuse	– Backyard composting programs – Internal county source reduction and reuse initiatives	– Additional 19,000 to 65,000 tons per year of yard waste generated in the county by 2025	– Improve public outreach and education to promote source reduction and reuse – Promote public/private source reduction and reuse programs – Promote a residential yard waste composting and/or grasscycling program – Implement county internal source reduction and reuse programs
Recycling	– Out-of-county composting of yard debris and vacuumed leaves – Grind brush and vacuumed leaves into mulch available for residents	– Additional 10,000 to 33,000 tons per year of yard waste sent to out-of-county composting facilities by 2025 – Additional 10,000 to 35,000 tons per year of yard waste ground into mulch	– Promote public/private recycling programs – Improve public outreach and education to promote recycling – Continue current yard waste recycling system; contract with out-of-county composting facilities for dedicated capacity
Collection	– Residential curbside collection – Commercial collection – Citizen disposal facilities – Vacuum leaf collection	– Additional 19,000 to 65,000 tons per year of yard waste collection by 2025 – Require additional yard waste collection vehicles and labor	– Partner with private waste collection companies and community stakeholders to improve residential yard waste collection service – Continue current vacuum leaf collection system – Promote use of special fuels, filters, and special vehicles for collection – Implement a collection and disposal strategy for emergencies
Transfer	– I-66 Transfer Station and I-95 Landfill Complex handles most yard waste generated in Fairfax County	– Additional 12,000 to 41,000 tons per year of yard waste handled at the I-66 Transfer Station by 2025 – Additional 7,000 to 24,000 tons per year of yard waste handled at the I-95 Landfill Complex by 2025	– Continue using the current transfer system – Reconfigure or construct waste handling areas at the I-66 Transfer Station, including areas to handle increased yard waste
Disposal	– All yard waste generated in the county is recycled	Not Applicable	Not Applicable

Source Reduction and Reuse

Current Programs

Fairfax County's current source reduction and reuse initiatives for yard waste include:

- advocating a backyard composting program, and
- promoting internal government initiatives.

Backyard Composting Program

During the 1990s, Fairfax County initiated a composting and grasscycling program to encourage home composting of food waste and yard debris. Backyard composting is the controlled decomposition of food scraps and yard trimmings in open piles, pits, or bins. Spreading finished compost on lawns and gardens conditions the soil and replenishes vital nutrients.

Grasscycling means leaving short grass clippings on lawns rather than collecting and bagging them. As the clippings filter to the ground and naturally decompose, nutrients return to the soil and support further turf growth.

The program entitled *YIMBY* for "Yes in my backyard" is directed toward managing grass and other types of yard debris at home to prevent its introduction into the waste management system. This program has met with limited success and recently, staff has placed less emphasis on this effort due to its limited public acceptance.

Backyard composting and grasscycling are important yard waste source reduction and reuse efforts.

Backyard composting and grasscycling are important source reduction and reuse efforts to prevent yard waste from entering the MSW collection system. Keeping yard material, such as grass left on the lawn and backyard compost materials, from the waste stream can eliminate a significant portion (estimated at 9.4 percent) of Fairfax County MSW.

Internal County Practices

Fairfax County supports and pursues internal yard waste source reduction and reuse initiatives. For example, the Fairfax County Park Authority ensures that all county facilities incorporate the concepts of environmentally sound grounds maintenance, including grasscycling, landscape alteration, and composting, to the maximum extent possible.

Assessment of Current and Future Source Reduction and Reuse Needs

Calculating the quantities of solid waste that are reduced prior to entering the waste stream is problematic. Therefore, the county does not develop source reduction and reuse projections for solid waste.

Fairfax County follows the solid waste hierarchy in designing its SWM system. The county prefers source reduction followed by reuse and recycling to disposal of solid waste. The SWM Program goal is to implement new programs that will maximize the volume of solid waste handled by source reduction and reuse over the SWMP planning period.

SWMP Actions

Table 8-2 shows Fairfax County's SWMP actions for the source reduction and reuse of yard waste. The county selected SWMP actions based on their alignment with the SWMP objectives (in Chapter 4) and their ability to close the gaps between the county's current SWM system and that required in the future. These SWMP actions are discussed in more detail in Chapter 11.

Table 8-2. Fairfax County Yard Waste Source Reduction and Reuse SWMP Actions

Yard Waste Source Reduction and Reuse SWMP Actions
Improve public outreach and education to promote source reduction and reuse
Promote public/private source reduction and reuse programs
Promote a residential yard waste composting and/or grasscycling program
Implement internal county source reduction and reuse programs

Recycling

Current Programs

The county provides three recycling collection options for yard waste: in one's own back yard, at the curb, or at the I-66 Transfer Station or I-95 Landfill Complex

Table 6-3 (in Chapter 6) shows yard waste recycling data for Fairfax County from 1999 to 2002. The county requires the recycling of yard debris, including leaves and grass clippings, as well as woody and brush materials. The county has provided three recycling options for yard debris: in one's own back yard, at the curb, or at the I-66 Transfer Station or I-95 Landfill Complex.

The yard debris collection program is available to residents of single-family homes and most townhouses. Grass and leaves can be set out seasonally and are collected April 1 through December 24. Property management companies at apartment and condominium complexes are required to recycle all yard debris generated in common areas.

The county currently (2004) provides leaf collection service to 20,198 household units in 30 approved leaf districts from the end of October through the end of the calendar year. Vacuum leaf collection service is provided only in specially created leaf collection districts during the leaf collection period. Revenue is derived from a levy ($0.015 per $100 of assessed real estate value in FY 2005) charged to homeowners within leaf collection districts. In all other areas of the county, leaves are collected in bags with other yard debris rather than by vacuum.

Fairfax County recycles yard waste at out-of-county composting facilities, and by distributing ground brush and leaves to residents.

Fairfax County uses three methods of recycling collected yard waste: (1) sending yard debris and vacuumed leaves to out-of-county composting facilities, (2) grinding brush into mulch available for residents, and (3) grinding vacuumed leaves available for residents.

Table 8-3, below, shows the quantities of yard waste recycled by these three methods. In 2002, the county sent 54,061 tons of yard debris to out-of-county composting facilities, the majority (32,133 tons) to the Prince William County Compost Facility at Balls Ford Road and a smaller amount (21,928 tons) to Loudoun Composting in Loudoun County.

Brush and vacuum leaves are mulched or ground and made available at no cost to county residents. In 2002, Fairfax County ground 48,196 tons of brush and 2,150 tons of vacuumed leaves.

Table 8-3. Fairfax County Yard Waste Recycling Quantities (2000–2002), tons

Recycling Method	2000	2001	2002
Yard Debris and Vacuumed Leaves Sent to Out-of-County Composting Facilities	45,060	49,561	54,061
Prince William County Compost Facility	21,414	29,502	32,133
Loudoun Composting	23,646	20,059	21,928
Brush Ground into Mulch	42,450	47,387	48,196
Vacuumed Leaves Ground into Mulch	6,390	7,523	2,150

Assessment of Current and Future Recycling Needs

Since yard waste is a component of MSW, the county developed yard waste generation projections using the MSW generation projections. Four alternative yard waste projections were calculated by multiplying the historical percentage of yard waste generated in Fairfax County MSW (9.4 percent) by the four MSW alternative projections. Chapter 2 of this SWMP presents the projected quantities of yard waste generated in Fairfax County over the SWMP planning period.

Fairfax County projects annual yard waste recycling quantities to increase between 15 and 48 percent from 2004 to 2025, *assuming continuation of current waste management practices.*

Almost all yard waste generated in Fairfax County is recycled. As a result, the yard waste generation projections also represent our yard waste recycling projections. As discussed in Chapter 2, the county expects annual yard waste recycling quantities to increase between 15 and 48 percent over the SWMP planning period, assuming the continuation of the county's current management practices and conditions. ***(Note that these projections assume the continuation of the county's current management practices and conditions.)***

Table 8-4 presents the projected quantities of yard waste by recycling method (i.e., yard waste and vacuumed leaves sent to out-of-county yard waste composting facilities and vacuumed leaves and brush ground available at county facilities). These estimates were developed based on current percentages of yard waste handled by these methods and future yard waste projections.